Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DONALD C. BURTON, NILANG DALWADI, RICK DOLCE, JOHN PRETE, AL BOZZI, NICK PINI, EMILIO COFRANCESCO, JEFF REILLY, JOE SPAGUA and J. MICHAEL WEAVER

Appeal No. 2003-0587
Application No. 09/533,514

ON BRIEF

Before COHEN, FRANKFORT and STAAB, Administrative Patent Judges

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 23 through 31, 37 through 41, 45 and 46. Claims 20 through 22 and 32 through 35, the only other claims remaining in the application, have been withdrawn from

consideration by the examiner pursuant to a restriction requirement. Claims 1 through 19, 36 and 42 through 44 have been canceled.

As noted on page 1 of the specification, appellants' invention relates to a case packer designed to pack containers (typically bottles or cans) into cases or trays at speeds up to 40 cases per minute. The particular problems addressed by appellants relate to perceived deficiencies in prior art lift table arrangements associated with such drop-type case packers 1) where high levels of shock loading are transmitted to containers released from the grid section of the case packer when they fall into the empty cases or trays on the lift table, and 2) with concerns over machine speed. In the paragraph bridging pages 6 and 7 of the specification, appellants make note that

> [t]he lifting table of the present invention is motor driven and controlled to limit the shock loading experienced by the containers as they are positioned within the cases. The lifting table includes a pair [sic] spur gears driven by the motor in meshing arrangement with a pair [sic] rack gears each mounted to a table and a novel gear guide to maintain proper engagement between the racks and gears and further to provide for backlash adjustment between the gears. A vibration and shock absorbing mount is used to position the motor to the machine to eliminate shock loading effects on the drive system and on the containers themselves.

Further details relating to these aspects of appellants' invention and to lift table drive motor control for minimizing the shock load associated with containers impacting the cases can be found on pages 12 through 15 of the specification.

Independent claims 23, 37, 41, 45 and 46 are representative of the subject matter on appeal and a copy of those claims can be found in Appendix A of appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Wayne	3,529,732	Sep. 22, 1970
Westerling	3,765,546	Oct. 16, 1973
Golantsev et al. (Golantsev)	3,837,140	Sep. 24, 1974
Raudat	4,570,413	Feb. 18, 1986
Hjalmer et al. (Hjalmer)	4,686,918	Aug. 18, 1987
Groebli et al. (Groebli)	4,861,529	Aug. 29, 1989
Leibach et al. (Leibach)	5,529,295	Jun. 25, 1996

Claims 23, 24, 26, 29, 30 and 41 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Westerling.

Claims 23, 37, 38, 45 and 46 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Raudat.

Claims 23 and 37 also stand rejected under 35 U.S.C. § 102(b) as being anticipated by Wayne.

Claim 23 is further rejected under 35 U.S.C. § 102(b) as being anticipated by Golantsev.

Claim 25 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Westerling in view of Leibach.

Claim 39 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Raudat in view of Leibach.

Claims 27, 28 and 40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Westerling.

Claims 27, 28 and 40 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Westerling in view of Hjalmer.

Claim 31 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Westerling in view of Groebli.

Rather than attempt to reiterate the examiner's full commentary with regard to the above-noted rejections and the

conflicting viewpoints advanced by the examiner and appellants regarding those rejections, we make reference to the examiner's answer (Paper No. 20, mailed September 17, 2002) for the reasoning in support of the rejections, and to appellants' brief (Paper No. 19, filed August 26, 2002) for the arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by appellants and the examiner. As a consequence of our review, we have made the determinations which follow.

Turning first to the examiner's various rejections of claim 23 under 35 U.S.C. § 102(b), we note that this claim is directed to a case packer machine including a lift table assembly having a lift table, and a lift table drive assembly driving the lift table between a lifted position and a lowered position, wherein the drive assembly "decelerates" the lift table as the lift table approaches the lowered position to reduce shock loading of the lift table. It is the examiner's view that appellants' claim 23

is readable on, and therefore anticipated by, the apparatus or machine disclosed in each of Westerling, Raudat, Wayne, and Golantsev. We agree.

Appellants' argument regarding each of the patents applied by the examiner against claim 23 is that they do not teach or suggest a drive assembly that **decelerates** the lift table **as the lift table approaches the lowered position**. The examiner's response to appellants' argument is to note that in each instance the lift table of the respective patents applied against claim 23 is driven downwardly from a lifted position to a lowered position and subsequently comes to a stop at the lowered position. Given that each of the lift tables goes from being downwardly moving to a stop at the lowered position, the examiner concludes that the lift table in each instance must **inherently** decelerate before coming to rest at the lowered position, and would thereby reduce shock loading of the lift table, at least to some extent. The examiner explains that, as a matter of physics, an object going from a state of motion to a state of rest must of necessity decelerate for a period of time (however small) before reaching its state of rest.

Although it is true that none of the patents applied by the examiner against claim 23 mentions decelerating the lift table therein as it approaches its lowered position, we nonetheless agree with the examiner that such deceleration must inherently occur in order for a moving lift table to come to a stop at the lowered position. As was made clear in In re Schreiber, 128 F.3d 1473,1478, 44 USPQ2d 1429, 1432 (Fed. Cir. 1997), by choosing to broadly define an element functionally as in appellants' claim 23 on appeal, appellants assume a risk, that risk being that where the U.S. Patent and Trademark Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require applicants to prove that the subject matter shown to be in the prior art does not possess the characteristic relied upon. In the present case, appellants have provided no evidence to prove that the apparatus or machine in each of Westerling, Raudat, Wayne and Golantsev is not capable of functioning in the manner set forth in claim 23 on appeal.

In light of the foregoing, the examiner's respective rejections of claim 23 under 35 U.S.C. § 102(b) as being anticipated by each of the patents to Westerling, Raudat, Wayne and Golantsev is sustained. Given the lack of any argument from appellants in the brief directed specifically to dependent claims 24, 26, 29 and 30 on appeal, we find that such claims will fall with claim 23, from which they depend. It follows that the examiner's rejection of claims 24, 26, 29 and 30 under 35 U.S.C. § 102(b) based Westerling will also be sustained.

As for the examiner's rejection of claim 41 under 35 U.S.C. § 102(b) based on Westerling, we note that claim 41 defines a lift table assembly "for supporting a case while said case is being filled with containers" and sets forth that the lift table assembly comprises: a lift table configured to support said case; a lift table drive assembly operably connected to the lift table and comprising a motor, a shaft coupled to the motor, a gear disposed on the shaft, and a rack gear pivotally attached to said lift table in meshing arrangement with the spur gear[1], and

[1] There is no proper antecedent basis for "said spur gear" in line 10 of claim 41. The earlier recitation in the claim is merely to "a gear disposed on said shaft." This ambiguity should be addressed and clarified during any further prosecution of the application before the examiner.

"wherein said motor lowers said lift table as said case is being filled with said containers, and wherein said motor decelerates said lift table as said lift table reaches a lowered position."

Like appellants (brief, page 6), we find that Westerling only discloses or teaches moving cases or bins (B) after they have been packed with bulk fruit or after they have been emptied of such fruit. There is nothing in the Westerling patent which teaches or suggests a lift table assembly "for supporting a case while said case is being filled with containers," and a drive assembly for such a lift table including a motor which lowers the lift table "as said case is being filled with said containers." Contrary to the examiner's view set forth on page 9 of the answer, we do not see that depositing a top bin (B5) atop a lower bin (B6) to form a stack of bins, as shown in Figure 27 of the Westerling patent, is in any way responsive to the subject matter of appellants' claim 41. Accordingly, the examiner's rejection of claim 41 under 35 U.S.C. § 102(b) based on Westerling will not be sustained.

Regarding the examiner's rejections of claim 37 under 35 U.S.C. § 102(b) based on Raudat or Wayne, we note that claim 37 is directed to a lift table assembly "for supporting a case while said case is being filled with containers" and sets forth that the lift table assembly comprises a lift table configured to support said case, and a lift table drive assembly operably connected to the lift table, "wherein said lift table drive assembly lowers said lift table as said case is being filled with said containers to reduce a shock load associated with said containers impacting said case."

Like appellants (brief, page 8), we find nothing in Wayne that teaches or suggests a lift table assembly "for supporting a case while said case is being filled with containers," and a lift table drive assembly which lowers the lift table "as said case is being filled with said containers." Wayne addresses a mechanism that functions as a stacking machine for cases, cartons, boxes or crates (A) to be stacked in a layered relationship on a pallet (6) or removed from the pallet in layers. As indicated in column 4, lines 28-46, of the Wayne patent, the vertical conveyor

mechanism therein is used as a palletizer and "to best advantage in conjunction with high volumetric operations such as is present in the canning or bottling lines of soft drink plants and breweries, for example, wherein cases of filled and sealed bottles or cans are produced in the line at rates of up to 40 or more per minute." The examiner's cryptic reference to column 5, lines 25-31 of Wayne in the rejection set forth on page 5 of the answer, does nothing to change our view as noted above. Thus, the examiner's rejection of claim 37 under 35 U.S.C. § 102(b) based on Wayne will not be sustained.

The patent to Raudat is directed to a case packer like that set forth in claim 37 on appeal, but this patent addresses the problem of dropping of the containers, and the associated impact of the containers on the bottom of the case and the lift table, in an entirely different way than appellants, and different from that set forth in claim 37 on appeal. The apparatus in Raudat includes a means (e.g., Fig. 4) for decelerating the downwardly moving articles (A) as they descend into the case and also provides an impact absorbing means (Figs. 2, 2A) mounted in

association with the top surface of the lift table. Like appellants (brief, page 7), we find nothing in Raudat which teaches or suggests a lift table drive assembly lowering the lift table as the case is being filled with containers. Instead, it appears that the lift table of Raudat remains stationary until the containers (A) are deposited in the case, with the impact absorbing means of Figures 2, 2A cushioning the containers or articles as they fall into the case and bottom out.

The examiner's assertion in the rejection (answer, page 4) that the case in Raudat "is accelerated and subsequently decelerated in a downward direction in order to absorb the impact of the articles A" and the reference to column 1, lines 14-27 of Raudat, do not appear to have anything to do with a drive assembly for a lift table which operates in the particular manner required in appellants' claim 37 on appeal. The examiner's further comments on pages 9-10 of the answer with regard to when the lift table of Raudat is started on its downward movement appear to be based on pure speculation, and would further appear to be contrary to the disclosure in the Raudat patent directed to

operation of the rollers (80, 80a) subsequent to their release of the articles entering the case (C), since premature downward movement of the lift table of Raudat would appear to preclude rollers (80, 80a) from attaining a position like that seen in Figure 3 of the patent. See column 6, lines 28-37, of Raudat for an explanation of the operation of the rollers (80, 80a). Thus, the examiner's rejection of claim 37 under 35 U.S.C. § 102(b) based on Raudat, and that of dependent claim 38, will not be sustained.

Claim 45 is directed to a lift table assembly "for supporting a case while said case is being filled with containers" and sets forth that the lift table assembly comprises a lift table configured to support said case, and a lift table drive assembly operably connected to the lift table, wherein said lift table drive assembly "controls a position of said lift table as said case is being filled with said containers to reduce a shock load associated with said containers impacting said case." Although the examiner has made little or no effort to provide any explanation as to exactly how claim 45 on appeal is readable on

the case packer of Raudat, we are nonetheless of the view that the subject matter of appellants' claim 45 is anticipated by that patent.

In particular, it is our view that the case packer of Raudat includes a lift table drive assembly that "controls a position of said lift table as said case is being filled with said containers to reduce a shock load associated with said containers impacting said case," in that the drive for the lift table in Raudat elevates the lift table to a prescribed vertical location closely adjacent the grid finger clusters (70), as opposed to some other position further removed from the grid, and thus controls a position of the lift table as the case thereon is being filled with containers to reduce a shock load associated with said containers impacting said case. The mere recitation that the lift table drive assembly in claim 45 "controls a position of said lift table as said case is being filled with said containers..." does not require that the lift table must be moved or moving during such filling with containers, as is described on pages 13-15 of appellants' specification.

In light of the foregoing, the examiner's rejection of claim 45 under 35 U.S.C. § 102(b) based on Raudat is sustained.

Independent claim 46 defines a case packer machine including a lift table assembly "for supporting a case while said case is being filled with containers" and sets forth that the lift table assembly comprises a lift table configured to support said case, and a lift table drive assembly operably connected to the lift table, wherein said lift table drive assembly "decelerates as said containers fall into said case." A careful reading of claim 46 makes clear that the lift table therein is moving "as said containers fall into said case," and, more specifically, that the lift table is being decelerated "as said containers fall into said case." There is nothing in the examiner's rejection (answer, pages 4-5) which accounts for the requirement in claim 46 of a moving lift table that is being decelerated "as said containers fall into said case."

Even though we have found, *supra*, that a deceleration of the lift table in Raudat must inherently occur as the table therein comes to a stop at the bottom of its range of travel, we find

nothing in Raudat which reasonable teaches or suggests that the lift table therein is moving and being decelerated "as said containers fall into said case." For this reason, the examiner's rejection of claim 46 under 35 U.S.C. § 102(b) based on Raudat will not be sustained.

Dependent claim 25 adds to independent claim 23 that the lift table drive assembly is "coupled to a machine frame by a vibration isolating assembly." The examiner has rejected claim 25 under 35 U.S.C. § 103(a) as being unpatentable over Westerling in view of Leibach, recognizing that Westerling does not disclose a vibration isolating assembly associated with the drive assembly therein and turning to Leibach to supply such a vibration isolating assembly (2) associated with a drive assembly or engine (4). The examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of appellants' invention to include a vibration isolating assembly as taught in Leibach in the invention of Westerling to damp vibrations (answer, page 6). We agree.

Appellants do not dispute the examiner's combination of Westerling and Leibach, but instead urge that the examiner's reliance on Leibach does not address the limitation of independent claim 23 argued above for patentability, i.e., that "the drive assembly decelerates the at least one lift table as the at least one lift table approaches the lowered position to reduce shock loading of the at least one lift table." Having found this argument unpersuasive with regard to claim 23, we likewise find it unpersuasive here for the same reasons. Thus, the examiner's rejection of dependent claim 25 under 35 U.S.C. § 103(a) as being unpatentable over Westerling in view of Leibach is sustained.

Dependent claim 39 adds to independent claim 37, a requirement for the lift table drive assembly to be "coupled to a machine frame by a vibration isolating assembly." The examiner has rejected claim 39 under 35 U.S.C. § 103(a) as being unpatentable over Raudat in view of Leibach. However, even if we were to agree with the examiner that it would have been obvious to one of ordinary skill in the art at the time of appellants'

invention to include a vibration isolating assembly as taught in Leibach in the invention of Raudat to damp vibrations (answer, page 6), such a modification of the case packer in Raudat would still not provide response for the limitation in claim 37 regarding a lift table drive assembly which "lowers said lift table as said case is being filled with containers." Accordingly, the examiner's rejection of dependent claim 39 under 35 U.S.C. § 103(a) as being unpatentable over Raudat in view of Leibach will also not be sustained.

Claims 27, 28 and 40 stand rejected under 35 U.S.C. § 103(a) on alternative grounds, i.e., as being unpatentable over Westerling alone or as being unpatentable over Westerling in view of Hjalmer. Claims 27 and 28 each depend from claim 26, which depends from independent claim 23, with claim 27 requiring that the spur gear of claim 26 be "comprised of a non-metallic material," while claim 28 specifies that the spur gear of claim 26 is "comprised of a nylon material." Claim 40 depends from independent claim 37 and sets forth details of the lift table drive assembly which includes, *inter alia*, a spur gear and a rack gear, each of which are "comprised of a non-metallic material."

We are at somewhat of a loss to understand the examiner's rejection of dependent claim 40 under 35 U.S.C. § 103(a) as being unpatentable over Westerling alone or as being unpatentable over Westerling in view of Hjalmer, since independent claim 37, from which claim 40 depends, has not been rejected by the examiner based on Westerling alone or Westerling in combination with any other prior art references. Thus, it is clear to us that the examiner has not made out a *prima facie* case of obviousness for claims 37 and 40, and, in particular, has not indicated how the apparatus in Westerling for stacking and unstacking bins is in any way responsive to the lift table assembly set forth in claim 37 on appeal "for supporting a case while said case is being filled with containers," and which includes a drive assembly for a lift table including a motor which lowers the lift table "as said case is being filled with said containers." Since we have concluded that the examiner has not made out a *prima facie* case of obviousness for claims 37 and 40, the rejections of claim 40 under 35 U.S.C. § 103(a) as being unpatentable over Westerling alone and as being unpatentable over Westerling in view of Hjalmer will not be sustained.

As for the examiner's alternative rejections of claims 27 and 28 under 35 U.S.C. § 103, we agree with appellants' arguments on pages 10-11 of the brief regarding the rejection of these claims based on Westerling alone and will not sustain that rejection. However, we will sustain the rejection of claims 27 and 28 under 35 U.S.C. § 103(a) based on Westerling in view of Hjalmer. As is clear from page 11 of the brief, appellants have not disputed the examiner's combination of Westerling and Hjalmer except to urge that the limitation of claim 23 regarding a drive assembly which "decelerates the at least one lift table as the at least one lift table approaches the lowered position to reduce shock loading of the at least one lift table" is not taught or suggested in Westerling. Having found that argument unpersuasive with regard to independent claim 23, we likewise find it unpersuasive here for the same reasons. Thus, the examiner's rejection of dependent claims 27 and 28 under 35 U.S.C. § 103(a) as being unpatentable over Westerling in view of Hjalmer is sustained.

Regarding the examiner's rejection of dependent claim 31 under 35 U.S.C. § 103(a) as being unpatentable over Westerling in view of Groebli, we note that appellants have again argued the "deceleration" aspects of claim 23 as distinguishing, without any separate argument as to the examiner's combination of Westerling and Groebli applied against claim 31. Having found that particular argument unpersuasive with regard to independent claim 23, we likewise find it unpersuasive here for the same reasons. Thus, the examiner's rejection of dependent claim 31 under 35 U.S.C. § 103(a) as being unpatentable over Westerling in view of Groebli is sustained.

In summary,

A) the examiner's rejection of claims 23, 24, 26, 29, 30 and 41 under 35 U.S.C. § 102(b) as being anticipated by Westerling has been sustained with regard to claims 23, 24, 26, 29 and 30, but not with regard to claim 41;

B) the rejection of claims 23, 37, 38, 45 and 46 under 35 U.S.C. § 102(b) based on Raudat has been sustained with regard to claims 23 and 45, but not with regard to claims 37, 38 and 46;

C) the examiner's rejection of claims 23 and 37 under 35 U.S.C. § 102(b) based Wayne has been sustained as to claim 23, but not with regard to claim 37;

D) the rejection of claim 23 under 35 U.S.C. § 102(b) based on Golantsev has been sustained;

E) the examiner's rejection of claim 25 under 35 U.S.C. § 103(a) as being unpatentable over Westerling in view of Leibach has been sustained;

F) the rejection of claim 39 under 35 U.S.C. § 103(a) as being unpatentable over Raudat in view of Leibach has not been sustained;

G) the examiner's rejection of claims 27, 28 and 40 under 35 U.S.C. § 103(a) as being unpatentable over Westerling alone has not been sustained;

H) the rejection of claims 27, 28 and 40 under 35 U.S.C. § 103(a) as being unpatentable over Westerling in view of Hjalmer has been sustained with respect to claims 27 and 28; but not with regard to claim 40; and

I) the examiner's rejection of claim 31 under 35 U.S.C. § 103(a) as being unpatentable over Westerling in view of Groebli has been sustained.

In light of the foregoing, the decision of the examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

IRWIN CHARLES COHEN Administrative Patent Judge	)	
CHARLES E. FRANKFORT Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
LAWRENCE J. STAAB Administrative Patent Judge	)	

cef/vsh

CANTOR COLBURN, LLP
55 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002